

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior listings and versions of claims in this application. Please amend claims 1 and 9, cancel claims 5, 7, 8, 11, 13, and 23-78, and add new claims 79-101 as follows:

1. (Currently Amended) An end effector apparatus comprising:  
  
a deflecting mechanism having a proximal portion, a distal portion, and a redirection mechanism between the proximal portion and the distal portion, the redirection mechanism configured to allow the distal portion to be redirected relative to the proximal portion;  
  
an end effector assembly coupled to the distal portion; and  
  
a first actuator coupled to the deflecting mechanism to redirect the distal portion with respect to the proximal portion via the redirection mechanism;  
  
a second actuator coupled to the end effector assembly to actuate the end effector assembly; and  
  
a proximal opening and a side gap defined by the deflecting mechanism, wherein each of the first and second actuators extends through the proximal opening and selectively extends through the side gap.
2. (Original) The apparatus of claim 1, wherein the first actuator is a wire.
3. (Original) The apparatus of claim 2, wherein the wire extends through a lumen defined by the deflecting mechanism.

4. (Original) The apparatus of claim 2, wherein the wire is coupled to the distal portion.
5. (Canceled)
6. (Original) The apparatus of claim 3, wherein the wire is coupled to the deflecting mechanism to allow the wire to move within the lumen.
7. - 8. (Canceled)
9. (Currently Amended) The apparatus of claim 8 1, wherein the second actuator is a wire.
10. (Original) The apparatus of claim 9, wherein the wire extends through a lumen defined by the deflecting mechanism.
11. (Canceled)
12. (Original) The apparatus of claim 10, wherein the wire is coupled to the deflecting mechanism to allow the wire to move within the lumen.
13. (Canceled)

14. (Original) The apparatus of claim 1, wherein the redirection mechanism comprises a pivot configured such that the distal portion pivots relative to the proximal portion.
15. (Original) The apparatus of claim 14, wherein the pivot includes at least one pin extending through holes defined by the proximal and distal portions.
16. (Original) The apparatus of claim 1, wherein the end effector assembly includes a grasper.
17. (Original) The apparatus of claim 1, wherein the end effector assembly includes a medical device.
18. (Original) The apparatus of claim 9, wherein the end effector assembly includes links, the end effector being connected to the links.
19. (Original) The apparatus of claim 1, wherein the deflecting mechanism is configured to allow the distal portion to be redirected up to at least 90 degrees relative to an axis of the proximal portion.
20. (Original) The apparatus of claim 1, wherein the deflecting mechanism is configured to allow the distal portion to be redirected from a first position where a

longitudinal axis of the distal portion is substantially collinear with a longitudinal axis of the proximal portion, to a second position where the longitudinal axis of the distal portion is not substantially collinear with the longitudinal axis of the proximal portion.

21. (Original) The apparatus of claim 1, wherein the deflecting mechanism is configured to allow the distal portion to be redirected in only one direction relative to the proximal portion.

22. (Original) The apparatus of claim 1, wherein the end effector assembly is configured to receive a current.

23. - 78. (Canceled)

79. (New) The apparatus of claim 1, wherein the side gap is defined by a side portion of the deflecting mechanism.

80. (New) The apparatus of claim 79, wherein the side gap includes a first gap defined by the proximal portion and a second gap defined by the distal portion.

81. (New) The apparatus of claim 80, wherein each of the first and second actuators selectively extends through the first and second gaps.

82. (New) The apparatus of claim 80, wherein a pivot is between the first gap and the second gap and between the proximal portion and the distal portion.

83. (New) An end effector apparatus comprising:

a deflecting mechanism having a proximal portion, a distal portion, and a redirection mechanism between the proximal portion and the distal portion, the redirection mechanism configured to allow the distal portion to be redirected relative to the proximal portion;

an end effector assembly coupled to the distal portion;

a first actuator coupled to the deflecting mechanism to redirect the distal portion with respect to the proximal portion via the redirection mechanism; and

wherein the first actuator does not extend through a side gap defined by the deflecting mechanism when a longitudinal axis of the distal portion is substantially collinear with a longitudinal axis of the proximal portion, and the first actuator extends through the side gap when the longitudinal axis of the distal portion is not substantially collinear with the longitudinal axis of the proximal portion.

84. (New) The apparatus of claim 83, further comprising a second actuator coupled to the end effector assembly to actuate the end effector assembly.

85. (New) The apparatus of claim 84, wherein the second actuator selectively extends through the side gap.

86. (New) The apparatus of claim 83, wherein the redirection mechanism comprises a pivot configured such that the distal portion pivots relative to the proximal portion.

87. (New) The apparatus of claim 83, wherein the deflecting mechanism redirects the distal portion from a first position where the longitudinal axis of the distal portion is substantially collinear with the longitudinal axis of the proximal portion, to a second position where the longitudinal axis of the distal portion is not substantially collinear with the longitudinal axis of the proximal portion.

88. (New) The apparatus of claim 83, wherein the side gap is defined by a side portion of the deflecting mechanism.

89. (New) The apparatus of claim 88, wherein the side gap includes a first gap defined by the proximal portion and a second gap defined by the distal portion.

90. (New) The apparatus of claim 89, further comprising a second actuator coupled to the end effector assembly to actuate the end effector assembly, and wherein each of the first and second actuators selectively extends through the first and second gaps.

91. (New) The apparatus of claim 89, wherein a pivot is between the first gap and the second gap and between the proximal portion and the distal portion.

92. (New) An end effector apparatus comprising:

a deflecting mechanism having a proximal portion, a distal portion, and a redirection mechanism between the proximal portion and the distal portion, the redirection mechanism configured to allow the distal portion to be redirected relative to the proximal portion, the redirection mechanism including a pivot configured such that the distal portion pivots relative to the proximal portion;

an end effector assembly coupled to the distal portion;

a first actuator coupled to the deflecting mechanism to redirect the distal portion with respect to the proximal portion via the redirection mechanism; and

a side gap defined by the deflecting mechanism, wherein the first actuator selectively extends through the side gap.

93. (New) The apparatus of claim 92, further comprising a second actuator coupled to the end effector assembly to actuate the end effector assembly.

94. (New) The apparatus of claim 93, wherein the second actuator selectively extends through the side gap.

95. (New) The apparatus of claim 92, wherein the first actuator does not extend through the side gap when a longitudinal axis of the distal portion is substantially collinear with a longitudinal axis of the proximal portion, and the first actuator extends through the side gap when the longitudinal axis of the distal portion is not substantially collinear with the longitudinal axis of the proximal portion.

96. (New) The apparatus of claim 95, wherein the deflecting mechanism redirects the distal portion from a first position where the longitudinal axis of the distal portion is substantially collinear with the longitudinal axis of the proximal portion, to a second position where the longitudinal axis of the distal portion is not substantially collinear with the longitudinal axis of the proximal portion.

97. (New) The apparatus of claim 92, wherein the side gap is defined by a side portion of the deflecting mechanism.

98. (New) The apparatus of claim 97, wherein the side gap includes a first gap defined by the proximal portion and a second gap defined by the distal portion.

99. (New) The apparatus of claim 98, further comprising a second actuator coupled to the end effector assembly to actuate the end effector assembly, and wherein each of the first and second actuators selectively extends through the first and second gaps.

100. (New) The apparatus of claim 98, wherein the pivot is between the first gap and the second gap and between the proximal portion and the distal portion.

101. (New) The apparatus of claim 1, wherein the first actuator does not extend through the side gap when a longitudinal axis of the distal portion is substantially collinear with a longitudinal axis of the proximal portion, and the first actuator extends



through the side gap when the longitudinal axis of the distal portion is not substantially collinear with the longitudinal axis of the proximal portion.